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1. **(Amended)** A peptide comprising a sequence of 14-50 amino acids characterised in that
- it contains a peptide turn comprising at least one citrulline residue, and
 - it contains less than 12 amino acids between two cysteine residues, with said citrulline residue being one of the amino acids between said cysteine residues and
 - said peptide is specifically recognised by rheumatoid arthritis autoimmune antibodies from patients suffering from rheumatoid arthritis.

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8. **(Twice Amended)** A peptide according to claim 1 characterised in that the amino acids flanking the citrulline residue do not interact with the citrulline side chain.

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12. **(Twice Amended)** A diagnostic kit for use in detecting rheumatoid arthritis, said kit comprising at least one peptide according to claim 1, with said peptide or antibody optionally bound to a solid support.

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13. **(Twice Amended)** A diagnostic kit according to claim 12, said kit comprising a range of peptides according to claim 1, optionally in combination with antigens that constitute immunogenic determinants for other auto-immune diseases, wherein said peptides are attached to specific locations on a solid substrate.

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15. **(Twice Amended)** A diagnostic kit according to claim 13 further comprising certain peptides that are not specific recognised by antibodies specific for rheumatoid arthritis and that are not attached to a solid support but are provided in the binding solution to be used as competitors and/or to block other antibodies that are present in sera from patients with autoimmune disease other than rheumatoid arthritis, thereby decreasing or eliminating possible cross-reaction and/or a-specific binding.

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18. **(Twice Amended)** An immunotoxin molecule comprising a cell recognition molecule being a peptide of claim 1, covalently bound to a toxin molecule or active fragment thereof.

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20. **(Twice Amended)** A diagnosticum for rheumatoid arthritis comprising a peptide according to claim 1 or an immunotoxin molecule according to claim 18.